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10/800,828	03/15/2004	Ted C. Johnson	200315498-1	1371

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EXAMINER
MIRZADEGAN, SAEED S

ART UNIT	PAPER NUMBER
2144	

MAIL DATE	DELIVERY MODE
10/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/800,828	JOHNSON, TED C.
Office Action Summary	Examiner	Art Unit	
	Saeed S. Mirzadegan	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>15 March 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-30</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>15 March 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to because Fig. 1, client application (client) is labeled

121 where it should be 112 per disclosure. Fig. 1, also depicts a well-known port

112(tcp/2001) where it should be (tcp/21) per disclosure. Fig. 2, has numerous items

not labeled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required

in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next

Office action. The objection to the drawings will not be held in abeyance.

Specification

2.   The disclosure is objected to because of the following informalities: page 11, line

25 recites " number to an intermediate port number. Subsequent processing, which may

involve on or" where it should read "number to an intermediate port number.

Subsequent processing, which may involve one or". Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or
> composition of matter, or any new and useful improvement thereof, may obtain a patent
> therefor, subject to the conditions and requirements of this title.

3.   Claims 23-30 are rejected under 35 U.S.C. 101 because The Claimed Invention

is directed to a judicial exception to 35 U.S.C. 101 and is not directed to a practical

application of such judicial exception because the invention as claimed does not

produce a tangible result as set forth in MPEP 2106.

4.   As written, applicant is claiming "An article comprising a machine-readable

storage medium that comprises instructions that, if executed, are operable". In the

disclosure, applicant further recites "Accordingly, such embodiments may comprise an

article in the form of a machine-readable storage medium onto which there are written

instructions, data, etc. that constitute a software program that defines at least an aspect

of the operation of the system. The storage medium may include, but is not limited to,

any type of disk, including floppy disks, optical disks, compact disk read-only memories

(CD-ROMs), compact disk rewritables (CD-RWs), and magneto-optical disks, and may

include semiconductor devices such as read-only memories (ROMs), random access

memories (RAMs), erasable programmable read-only memories (EPROMs), electrically

erasable programmable read-only memories (EEPROMs), flash memories, phase-

change or ferroelectric memory, magnetic or optical cards, or any other type of media

suitable for storing electronic instructions. Similarly, embodiments may be implemented

as software modules executed by a programmable control device, such as a computer

processor or a custom designed state machine" (page 13, ¶0053, lines 14-25). In

essence the applicant is claming a non-statutory subject matter.

5.   In order for software claims to be statutory, they must be claimed in combination

with an appropriate medium and/or hardware to establish statutory category of invention

and enable any functionality to be realized as set forth in MPEP 2106.01.

Software, *per se*:

The claims lack the necessary physical articles or objects to constitute a machine or a
manufacture within the meaning of 35 USC 101. They are clearly not a series of steps
or acts to be a process nor are they a combination of chemical compounds to be a
composition of matter. As such, they fail to fall within a statutory category. They are, at
best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or
"nonfunctional descriptive material." Both types of "descriptive material" are nonstatu-
tory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759.
When <u>functional</u> descriptive material is recorded on some computer-readable medium, it
becomes structurally and functionally interrelated to the medium and will be statutory in
most cases since use of technology permits the function of the descriptive material to be
realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed.
Cir. 1994)

Merely claiming <u>non</u>functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "the sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form

the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1-3, 23, 27 are rejected under 35 U.S.C. 102(b) as being anticipated by

Yarborough, US PG Pub. No. 2003/0065950.

7.   Regarding claim 1, Yarborough discloses a method comprising: detecting a client

connection at a first port (see e.g. page 1, ¶0008, lines 1-3); providing the client with a

decoy port number (see e.g. page 1, ¶0010, lines 24-25); and providing services to the

client on a second port that is mapped to the decoy port number (see e.g. page 1,

¶0010, lines 14-21).

8.   Regarding claim 2, Yarborough discloses the decoy port number is provided to

the client by the operation of a routine that is associated with the server (see e.g. page

1, ¶0010, lines 14-21).

9.   Regarding claim 3, Yarborough discloses launching the server on the second

port; and monitoring the second port for a connection by the client (see e.g. page 1,

¶0010, lines 14-21).

10.   Claim 23 list all the same elements of claim 1, but in a machine-readable storage

medium that comprises instructions form rather than method form. Therefore, the

supporting rationale of the rejection to claim 1 applies equally as well to claim 23.

11.   Claim 27 list all the same elements of claim 1, but in architecture form rather than

method form. Therefore, the supporting rationale of the rejection to claim 1 applies

equally as well to claim 27.

Claim Rejections - 35 USC § 102

12.   Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Fan, US PG

Pub. No. 2004/0019689.

13.   Regarding Claim 21, Fan discloses a plurality of ports, each port having a

respective port number (see e.g. page 1, ¶0006, lines 5-13), an application (see e.g.

page 1, ¶0009, lines 4-5); and means for effecting secure access to the application by

redirecting a client from a first port to a second port (Fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness

under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 4-19, 24-26, 28, 29 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Yarborough in view of Fan.

15. Regarding Claim 4, Yarborough discloses the invention substantially as claimed.

However, Yarborough does not teach: if there is no connection by the client within a

predetermined time interval, terminating execution of the server on the second port.

1. In the same field of endeavor, Fan teaches (see e.g. page 2, ¶0019, lines 34-42).

16.   It would have been obvious to one of ordinary skill in the networking art at the

time the applicant's invention was made to combine Fan's teachings as explained

above with the teachings of Fan, for the purpose of (see Fan, page 2, ¶ 0017, lines 6-7).

Yarborough provides motivation to do so, by enabling a FTP client and a FTP server in

secured hardware arrangement using extremely few administrative resources (see

Yarborough, page 3, ¶0029, lines 1-4).

17.   Regarding Claim 5, Yarborough discloses the invention substantially as claimed.

However, Yarborough does not teach: maintaining a table of available decoy port

numbers that are mapped to valid port numbers.

18.   In the same field of endeavor, Fan teaches (see e.g. page 2, ¶0018, lines 15-17).

19.   The same motivation as claim 4 applies equally as well to claim 5.

20.   Regarding claim 6, Yarborough-Fan disclose the invention substantially as

claimed. Yarborough further discloses subsequent to providing the decoy port number

to the client, launching the server on the second port (see e.g. page 1, ¶0010, lines 14-

21)

21.   Regarding claim 7, Yarborough-Fan disclose the invention substantially as

claimed. However, Yarborough does not teach: if there is no connection by the client

within a predetermined time interval, terminating execution of the server on the second

port.

22.   In the same field of endeavor, Fan teaches (see e.g. page 2, ¶0018, lines 15-17).

23.   The same motivation as claim 4 applies equally as well to claim 7.

24.   Regarding claim 8, Yarborough-Fan disclose the invention substantially as

claimed. However, Yarborough does not teach: verifying via a server log file whether the

client effected a connection to the second port within the predetermined time interval

25.   In the same field of endeavor, Fan teaches (see e.g. page 2, ¶0018, lines 15-17).

26.   The same motivation as claim 4 applies equally as well to claim 8.

27.   Regarding Claim 9, Yarborough discloses the invention substantially as claimed.

However, Yarborough does not teach: a plurality of ports, each port having a respective

port number.

28.   In the same field of endeavor, Fan teaches (see e.g. page 1, ¶0006, lines 5-13).

29.   The same motivation as claim 4 applies equally as well to claim 9.

30.   Regarding Claim 10, the limitations of claim 10 have already been addressed

above in the method form as opposed to the system form of claim 10.

31.   Regarding Claim 11, the limitations of claim 11 have already been addressed

above in the method form as opposed to the system form of claim 11.

32.   Regarding Claim 12, the limitations of claim 12 have already been addressed

above in the method form as opposed to the system form of claim 12.

33.   Regarding Claim 13, the limitations of claim 13 have already been addressed

above in the method form as opposed to the system form of claim 13.

34.   Regarding Claim 14, the limitations of claim 14 have already been addressed

above in the method form as opposed to the system form of claim 14.

35.   Claim 15 is substantially the same as claim 9 with the variation of having

replicated the server application in the system and is thus rejected for reasons similar to

those in rejecting claim 9. It would have been obvious to one of ordinary skill in the

networking art at the time the applicant's invention was made to increase (i.e. double or

triple) the number of server applications to increase the performance of the system.

36.   Claim 16 is substantially the same as claim 14 with the variation of having

replicated the server application in the system and thus replicating routines. Claim 16 is

thus rejected for reasons similar to those in rejecting claim 14. It would have been

obvious to one of ordinary skill in the networking art at the time the applicant's invention

was made to increase (i.e. double or triple) the number of server applications thereby

increasing (i.e. doubling or tripping) the routines to increase the performance of the

system.

37.   Regarding Claim 17, Yarborough discloses the invention substantially as

claimed. However, Yarborough does not teach: translating.

2.   In the same field of endeavor, Fan teaches (see e.g. page 4, ¶0029, lines 18-21).

38.   The same motivation as claim 4 applies equally as well to claim 17.

39.   Regarding Claim 18, the limitations of claim 18 have already been addressed

above.

40.   Regarding Claim 19, the limitations of claim 19 have already been addressed

above.

41.   Regarding Claim 24, the limitations of claim 24 have already been addressed above in the method form as opposed to a machine-readable storage medium that comprises instructions form.

42.   Regarding Claim 25, the limitations of claim 25 have already been addressed above in the method form as opposed to a machine-readable storage medium that comprises instructions form.

43.   Regarding Claim 26, the limitations of claim 26 have already been addressed above in the method form as opposed to a machine-readable storage medium that comprises instructions form.

44.   Regarding Claim 28, the limitations of claim 28 have already been addressed above in a machine-readable storage medium that comprises instructions form as opposed to an architecture form.

45.   Regarding Claim 29, the limitations of claim 29 have already been addressed above in a machine-readable storage medium that comprises instructions form as opposed to an architecture form.

Claim Rejections - 35 USC § 103

46.   Claims 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fan in view of Yarborough.

47.   Regarding Claim 22, Fan discloses the invention substantially as claimed. However, Fan does not teach: a routine that, if executed, is operable to provide the client with a decoy port number that maps to the second port number.

3.   In the same field of endeavor, Yarborough teaches (see e.g. page 1, ¶0003, lines 3-4) FTP.

48.   It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Yarborough's teachings as explained above with the teachings of Fan, for the purpose of (see Yarborough, page 3, ¶0029, lines 1-4). Fan provides motivation to do so, by providing an expedient manner in which another machine may connect to better services (see Fan, page 2, ¶ 0017, lines 6-7).

Claim Rejections - 35 USC § 103

49.   Claims 20 & 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarborough-Fan in view of Rueda et al. (Rueda) US. PG Pub. No. 2002/0112076.

50.   Regarding Claim 20, Yarborough-Fan discloses the invention substantially as claimed. However, Yarborough-Fan do not teach: mapping the decoy port number to an intermediate port number; and effecting an offset to the intermediate port number.

4.   In the same field of endeavor, Rueda teaches (see e.g. page 22, ¶0306, lines 1-5 & Fig. 30) FTP.

51.   It would have been obvious to one of ordinary skill in the networking art at the time the applicant's invention was made to combine Yarborough-Fan's teachings as explained above with the teachings of Rueda, for the purpose of (see Yarborough, page 3, ¶0029, lines 1-4). Rueda provides motivation to do so, by allowing a network (client-side network) to have access to another network (the server-side or internet side) using IP-based protocols (see Rueda, page 4, ¶ 0041, lines 1-4).

52.   Regarding Claim 20, Yarborough-Fan discloses the invention substantially as claimed. However, Yarborough-Fan do not teach: mapping the decoy port number to an intermediate port number; and effecting an offset to the intermediate port number.

5.   In the same field of endeavor, Rueda teaches (see e.g. page 22, ¶0306, lines 1-5 & Fig. 30) FTP.
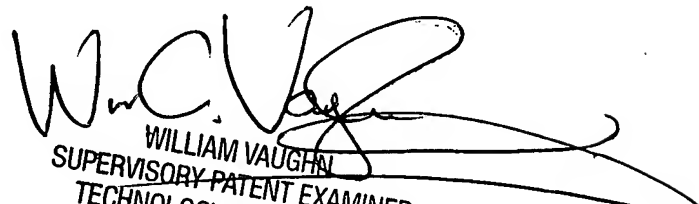
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed S. Mirzadegan whose telephone number is 571-270-3044. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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